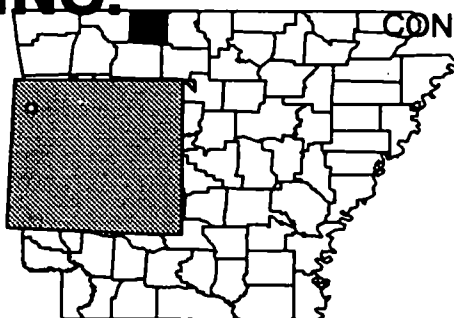


ARKWOOD, INC.

ARKANSAS

EPA ID# ARD084930148



EPA REGION 6

CONGRESSIONAL DISTRICT 03

Boone County

Site Description

- Location:**
- West of US Highway 65 and 1/2 mile southwest of Omaha, in Boone County, Arkansas; the site is bordered on the south and southwest by Cricket Road and on the north by Missouri-Pacific Railroad tracks.
- Population:**
- Estimated 650 people within 3 miles of the site.
- Setting:**
- Nearest residence: 2 residences within 500 feet of the site; 174 homes within a one mile radius.
 - Nearest drinking water well less than 1/4 mile from the site; 12 residences immediately down Cricket Valley have been hooked up to the city water supply.
 - Encompassing approximately 15 acres, the site was utilized as a PCP and creosote wood preserving facility from the early 1960s to 1984.
 - Existing onsite structures and remnants include a debarking shed (the machinery is mostly disassembled and only part of the debarker mechanism is left), a small well house, and numerous old foundations.
- Hydrology:**
- Located in the springfield Plateau province of the Ozark Highlands region of Northwestern Arkansas, the Arkwood site is located in a karst terrain formed by the solution of limestone and dolomite by groundwater. The near surface formations at the site are the Sylamore sandstone, and the St. Joe and Boone limestones.
 - 54 springs have been identified within a 1.5 mile radius of the site. These springs discharge from hillsides or in valley bottoms. Only one spring, New Cricket Spring, has been demonstrated to be hydraulically connected to the site in a down gradient direction. There are no known users of the water from New Cricket Spring.

Wastes and Volumes

- The major areas of contamination include the process and drip tracks areas; the wood storage area; railroad drainage ditch (contaminated with process wastes); the treated wood storage area; a sinkhole used to dispose of waste from approximately 1962-1970 (now covered); and an area of wood chips.

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- Principle Pollutants at the Arkwood Industries Superfund site include soils that are contaminated with Polycyclic Aromatic Hydrocarbons (PAHs), Pentachlorophenol (PCP), and trace dioxins. New Cricket Spring, approximately 1/4 mile northwest of the site, contains low (1 ppm) levels of PCP.
- The volume of pollutants to be addressed are estimated to be approximately 20,400 cubic yards of contaminated soils.

Site Assessment and Ranking

NPL LISTING HISTORY

Site HRS Score: 28.95

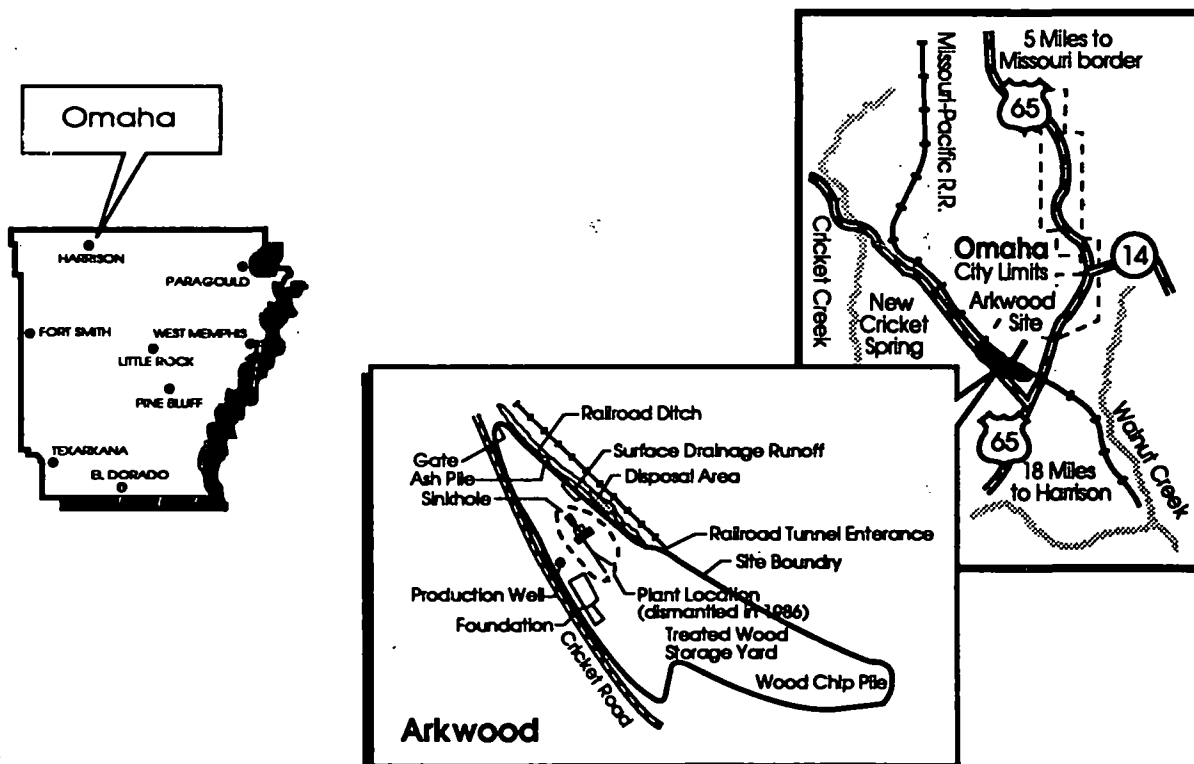
Proposed Date: 09/04/85

Final Date: 3/31/89

NPL Update: No. 4

- The PRPs sent comments to Headquarters and the Region contesting the site ranking. Mass Merchandizers, Inc. (MMI) contended that the HRS package contained two errors which significantly affected the ultimate scores. The questions concerned calculations of waste volume and the calculation of ground water targets.

Site Map and Diagram



The Remediation Process

Site History:

- The Arkwood site was originally excavated by the railroad to obtain material for the construction of railroad embankments between 1954 and 1962.
- In 1962, Arkwood, Inc. opened a single cylinder PCP and creosote wood treatment facility and operated the site until 1973. From 1973 to 1984, Mass Merchandiser, Inc. (MMI) operated the plant under a lease agreement with the owner.
- MMI ceased operations in 1984, at which time MMI sold or removed its remaining inventory and materials prior to the expiration of its lease in 1985. The owner subsequently dismantled the plant in 1986.
- EPA issued an Administrative Order (AO) to the PRPs to fence the site and post warning signs in August of 1987; the site owner responded by erecting a fence and posting the signs.
- On May 15, 1986, EPA and MMI entered into an Administrative Order on Consent (AOC) to perform the Remedial Investigation and Feasibility Study (RI/FS).
- In November, 1986, the site owner denied site access to conduct the RI/FS. On July 12, 1988, the Department of Justice and the site owner signed a Consent Decree allowing EPA access to the site for conducting the RI/FS and any response action.
- In August, 1987, the Potentially Responsible Party (PRP), with EPA oversight, installed a fence and warning signs.
- The RI/FS was completed in May 1990; a ground water tracer study investigation was completed in September 1992.
- On May 30, 1991, EPA and MMI signed a Consent Decree for conducting the Remedial Design and Remedial Action (RD/RA). Due to various legal delays, the Consent Decree for the RD/RA was entered by the Court September 24, 1992.
- The RD/RA Workplans were approved by EPA on September 25, 1992 and mobilization to the site immediately followed for initiating RD activities.
- The pilot scale studies conducted as part of the RD activities demonstrated that the sieve process, preceded by an in-situ drying step, was effective for separating affected fine particles (soil) from the unaffected coarse material (rocks) at the site. Therefore, a wash step did not appear necessary as part of the pre-treatment process. Due to the results of this study, EPA agreed to phase the RD/RA project on August 24, 1993 in order to expedite the remedial action at the site:

Phase I, Interim Action (Pretreatment & Storage Stage).

◆ For definition purposes, Phase I is considered an "Interim Action" for the Arkwood Site consisting of the pretreatment and storage stage of the remedy specified in the Record of Decision and Consent Decree. In addition, Phase I includes those backfill activities which needed to be completed to minimize adverse environmental impacts while the Phase II, Final Action RD is being completed (i.e., backfill of material meeting clean up objectives). Mobilization for this Interim Action was initiated in February 1994 and was mostly completed in October 1994; however, due to weather impediments, those tasks not completed in October 1994 will be completed in early spring 1995.

Phase II, Final Action (Incineration & Site Closure).

◆ For definition purposes, Phase II is considered the "Final Action" for the Arkwood Site consisting of the incineration and site closure stage of the remedy specified in the Record of Decision and Consent Decree. Phase II will include those backfill activities necessary to address the ash generated from the incineration process. The design for this Final Action will be completed in 1995.

Health Considerations:

- The baseline risk assessment (assumes no remedial action is taken) for the Arkwood site estimated four in one thousand excess carcinogenic risk in consideration of future residential land use on the main site area; two in ten thousand excess risk was estimated for railroad workers in the railroad ditch area.

Other Environmental Risks:

- No endangered species are known to inhabit the area on or near the site; no environmental impacts were identified for off-site areas.

Record of Decision

Signed: September 28, 1990

- The 1990 selected remedy calls for decontamination and removal of existing structures and foundations, onsite treatment of contaminated soils and sludge (from the railroad ditch), and ground water monitoring in New Cricket Spring.

Ground Water:

- The ground water in New Cricket Spring will be monitored for two years following source control to determine if natural attenuation is occurring; contingency calls for treatment if Arkansas Water Quality Standards are not met at that time.

Soil Treatment:

- The initial treatment of excavated soil will include separation of coarse material (rock) from fines (soil) via a sieve technology; final treatment of soil and sludge will include destruction of contaminants via an onsite incinerator; ash and coarse material meeting cleanup levels will be backfilled onsite.

Other Remedies Considered

1. No Action
2. Limited Action
3. Consolidate Soils & Cap in Place
4. Sieve & Wash Soils, Consolidate & Cap in Place
5. Sieve & Wash Soils, Biologically Treat Fines, Consolidate & Cap in Place
6. Landfill Affected Soils Onsite

Reason Not Chosen

Not Protective of Human Health & Environment
Access Restrictions not Effective; Not Protective of Human Health & Environment
Continued threat to groundwater; Does not meet ARARs.
Continued threat to groundwater; Uncertainty in Achieving Cleanup Objectives.
Continued threat to groundwater; Uncertainty in Achieving Cleanup Objectives
Biological Treatment of Dioxin not effective
Continued threat to groundwater; Implementation Difficulty.

Community Involvement

- Community Involvement Plan: Developed 02/87.
- Open houses and workshops: Public meeting 2/87; Sample results fact sheet 9/87; Update 1/88; Water results fact sheet 7/88; Open house 10/88; Update 2/89; Phase I results fact sheet 6/89; Phase II fact sheet 9/89; Workshop held 2/12/90; Open House 12/92; meeting on 5/94.
- Original Proposed Plan Fact Sheet and Public Meeting: 07/90.
- Original ROD Fact Sheet: 10/90; RD Fact Sheet 12/92
- RD/RA Activities: Community interviews 11/90-12/90. Incineration workshop 2/91; Open House for opening of Satellite Office at Omaha Public School 12/92. Open House to discuss the phased approach and upcoming Interim Remedial Action, 05/19/93.
- Citizens on site mailing list: 310
- Constituency Interest: Low level organized interest; high individual interest of several residents; Congressional interest. Media coverage in Missouri because of nearby Table Rock Lake and resort. Nearby residents concerned about incineration safety and air emissions for nearby school.
- Site Repository: Omaha Public School, College Street, Omaha, AR 72662
- Satellite Information Office: Omaha City Hall, Omaha, AR 72662

Technical Assistance Grant

- Availability Notice: 01/89
- Letters of Intent Received: None
- Grant Award: None

Fiscal and Program Management

- Remedial Project Manager: Cynthia Kaleri
- State Contact: Michael Arjmandi
- Community Involvement Coordinator: Donn Walters
- Attorney: Jon Weisberg
- State Coordinator: Marilyn Owen
- Prime Contractor: PRPs - ERM Southwest
EPA, Oversight - Weston

Cost Recovery: Enforcement

- PRPs Identified: 4
- Viable PRP: 1
- The present owner of the site is Mary F. Burke, who acquired the property from Hallie C. Ormond. Mr. C.C. (Bud) Grisham operated the woodtreating facility from about 1963 to 1965. From 1965 until 1973, the treatment facilities at the site were operated by Arkwood, Inc., an Arkansas Corporation, whose stock was then entirely owned by C.C. and Mary Jo Grisham, (Hallie Ormond's son-in-law and daughter). The assets of Arkwood, Inc. were conveyed to MMI in 1973 and formally dissolved in 1974. Upon purchasing the assets of Arkwood, Inc., MMI leased the property from Ormond until the lease expired on January 1, 1985.

Present Status and Issues

- Fencing the site and installing warning signs have limited access to the site, thereby reducing the potential of exposure to hazardous substances at the Arkwood, Inc. site and making the area safer while final cleanup activities are planned.
- The Phase I 100% Remedial Design was conditionally approved by EPA and ADPC&E in June 1994. Mobilization for this Interim Action was initiated in February 1994 and was partially completed in October 1994; however, due to weather impediments, this action will be restarted and completed in early spring 1995.
- EPA and the PRP are currently considering an Explanation of Significant Differences for the approved ROD in order to further expedite the remedial action. Since volumes actually excavated during the Interim Action are much less than anticipated during the FS, off-site incineration at a commercial facility (for affected fines stored at the site) could be accomplished much sooner than design and implementation of onsite incineration. This change in the remedial action would be favorable for the local community since the currently planned onsite incineration would have to be carried out in close proximity to the local school.

Cleanup Measurements

- Process tanks and structures were removed from the site, thereby eliminating the potential for exposure for workers and trespassers.
- Supplying city water to area residents has reduced the risk of possible exposure to shallow ground water.